

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL
RECEIVED
MAY 29 1997
Federal Communications Commission
Office of Secretary

In the Matter of)
)
Advanced Television Systems) MM Docket No. 87-268
and Their Impact Upon the)
Existing Television Broadcast)
Service)

**PETITION FOR RECONSIDERATION
OF DECISION REGARDING CHANNELS 2-6**

CERTAIN CHANNEL 2-6 LICENSEES

Kurt A. Wimmer
Erika F. King

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
Post Office Box 7566
Washington, D.C. 20044
(202) 662-6000

Their Attorneys

May 29, 1997

No. of Copies rec'd
List ABGUE

049

TABLE OF CONTENTS

Summary	i
I. Lack of Support For The Commission's Decision	3
II. The Special Characteristics of Channels 2-6	8
III. Uncertainty Caused by the Commission's Decision	11
Conclusion	13

SUMMARY

The Commission has inappropriately and unnecessarily singled out stations operating NTSC and DTV in channels 2-6 for "wait and see" status regarding the future of their channels in the digital world. Imposition of this status on these stations (1) has no support in any engineering calculations or field data, (2) is contrary to good public policy, and (3) creates destructive uncertainty for a considerable number of both commercial and noncommercial broadcasters. We respectfully request that the Commission consider all channels between 2 and 51 fairly and equally for the ultimate DTV core.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Advanced Television Systems) MM Docket No. 87-268
and Their Impact Upon the)
Existing Television Broadcast)
Service)

TO: The Commission

PETITION FOR RECONSIDERATION

The undersigned broadcasters are an ad hoc group of commercial and noncommercial stations operating NTSC stations between channels 2 and 6, or slated to operate DTV stations between channels 2 and 6. The undersigned are pleased that the Commission developed its Table of Allotments using channels between 2 and 51 "without bias against the use of any channel in this band." 6th Report and Order ¶ 76. Nevertheless, the undersigned are greatly concerned by the equivocation reflected in the Commission's decision that "if the lower VHF channels 2-6 prove acceptable for DTV use, [it] will consider retaining these channels for DTV and adjusting the core spectrum to encompass channels 2-46 rather than channels 7-51." Id. ¶ 83 (emphasis added). We believe the Commission has placed a burden on certain channels (and only those channels) to prove themselves appropriate for digital television, noting that if they do so, the Commission will then merely consider "changing" the core from 7-51 to 2-46.

In short, the Commission has inappropriately and unnecessarily singled out Channel 2-6 NTSC and DTV stations for "wait and see" status regarding the future of their channels in the digital world. We believe that this "maybe and maybe not" status (1) lacks support in the engineering calculations or field data, (2) is contrary to good public policy, given the specially suitable characteristics of the spectrum in question for wide-area broadcast service, and (3) creates destructive uncertainty for a considerable number of both commercial and noncommercial broadcasters -- all to the ultimate detriment of the public, particularly in rural and fringe areas, which are particularly well-served by the unique wide-area coverage capabilities of channels 2-6. As numerous parties, including the Joint Broadcasters, argued in comments filed with the Commission, no spectrum should be stigmatized with "wait and see" status, particularly channels 2-6. And if noise problems in the spectrum at channels 2-6 emerge and interfere with DTV transmission, the Commission has at its disposal other effective means of dealing with the problem.

Accordingly, we ask the Commission to consider all channels between 2 and 51 fairly and equally for the core ultimately adopted, without bias or presumptions against any.

I. LACK OF SUPPORT FOR COMMISSION'S POSITION

In the Sixth Further Notice of Proposed Rulemaking^{1/} ("Notice"), the Commission specifically asked for comment on its tentative conclusion that VHF channels 2 through 6 are less suitable for digital broadcasting than UHF channels, due to high levels of atmospheric and man-made noise.^{2/} Parties addressing the issue were asked to provide specific information and engineering analysis on whether the longer range propagation characteristics of channels 2 through 6 might outweigh the disadvantage of this presumed higher level of noise.^{3/} Additionally, the Notice requested comment on whether the Commission's proposed choice of core spectrum (channels 7 through 51) was appropriate.^{4/}

The Commission did not cite any support for its original concern that channels 2 through 6 might be unsuitable for digital television. The information available at the time, upon which the Commission presumably relied, was the report published after field tests of digital television were conducted in Charlotte, North Carolina, during the summer of

^{1/} Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 11 F.C.C.R. 10968 (1996).

^{2/} Notice ¶ 35.

^{3/} Id.

^{4/} Id.

1995.^{5/} However, the report from those tests, which involved transmission of the digital television signal on channels 6 and 53, explicitly declined to draw any conclusion regarding the suitability of low-band VHF channels for digital television.^{6/}

While the Charlotte tests on channel 6 experienced unanticipated interference from impulse noise (i.e., leaky power lines as well as automobile ignition systems), the report indicates that the engineers who oversaw the tests believe the impulse noise problem to be atypical (i.e., not representative of other areas).^{7/} In addition, the report notes that "emphasis must be given to the fact that testing has been carried out at transmission power levels only one tenth of . . . those expected to be employed in practice." It points out that at the expected power levels, "interfering sources [will] be substantially less effective in producing impairments."^{8/} As a result, given the limited sample size

^{5/} See Terrestrial Broadcast Field Tests, in Record of Test Results for Digital HDTV Alliance System submitted to Advisory Committee on Advanced Television, Federal Communications Commission (October 1995) ("Charlotte Report").

^{6/} See Charlotte Report at 2, 13.

^{7/} See Comments of Du Treil at 6 (Nov. 19, 1996). Unless otherwise indicated, all of the Comments referred to in this Petition were filed with respect to the Sixth Notice of Proposed Rulemaking and were filed on or before November 22, 1996. Unless otherwise indicated, all of the Reply Comments referenced in this Petition were filed on or before January 24, 1997.

^{8/} Charlotte Report at 4.

and the use of unusually low power, the VHF results were deemed "inconclusive."^{9/}

Perhaps more importantly, however, the results speak to the second question asked by the Commission -- i.e., whether the longer range propagation characteristics of channels 2-6 (and the resulting extended coverage in rural areas and rugged terrain), may outweigh the disadvantage of any noise encountered at these channels. As explained by the engineering firm of du Treil, Lundin, & Rackley in their Comments, a comparison of the NTSC and DTV reception in the Charlotte tests shows that DTV fares far better in the low VHF channels than NTSC does, even when operating at a far lower power.^{10/} Specifically, du Treil reports, satisfactory DTV reception occurred at 81.7 percent of the locations in question, while satisfactory NTSC reception occurred at only 39.6 percent.^{11/} In other words, despite noise, and despite a lower power level, DTV reception at Channel 6 was satisfactory at twice as many locations as was NTSC reception.^{12/} In short, the DTV system performed significantly better than the NTSC system, even in the presence of impulse noise. "All in all," the report

^{9/} Charlotte Report at 2, 13.

^{10/} Comments of du Treil at 6-7; see also Charlotte Report at 11.

^{11/} Comments of du Treil at 6.

^{12/} Id.

concludes, "the 1995 field testing of the [Grand Alliance] full system prototype supports the conclusion of the 1994 transmission subsystem testing that HDTV service will be available where NTSC service is presently available, and in many instances where NTSC service is unacceptable."^{13/}

Not surprisingly, then, nearly every entity that chose to respond to the Commission's question about the suitability of channels 2-6 challenged the Commission's assumption.^{14/} Often citing the Charlotte report, broadcasters labelled the Commission's assumption premature and unwise.^{15/} Engineering consultants outlined the

^{13/} Charlotte Report at 18.

^{14/} Moreover, the large number of commenters supporting use of channels 2-6 without mentioning the alleged noise problem rebuts the suggestion that these channels are somehow presumptively inappropriate for digital television. See, e.g., Comments of Blackstar Communications at 4-5; Comments of California Oregon Broad. Inc. at 5 n.4; Comments of Chris Craft / United at 7; Comments of ComCorp of Texas at 1; Comments of Freedom Communications at 6; Comments of Independent Broad. Co. at 2; Comments of La Dov Educ. Outreach at 3; Comments of Malrite Communications Group, Inc., Engineering Statement at 4; Comments of Media Gen. at 5; Comments of Meredith Corp. at 3-12; Comments of NBC at 5; Comments of Pappas Telecasting at 4-5; Comments of Pulitzer at 3-4; Comments of Ramar Communic. at 3-4; Comments of RGV Educ. Broad., Inc. at 3-4; Comments of Silver King Communic. at 2; Comments of Univision Communic., Inc., at 8; see generally Reply Comments of Broadcasters Caucus at 3-9 (detailing overwhelming opposition to core plan).

^{15/} See, e.g., Comments of Fireweed Communications, Anchorage, at 9; Comments of Media General Inc. & Park Acquisitions Inc. at 5; Comments of Meredith Corporation, at 3-12; Comments of Scripps Howard at 3-4; Supplemental Comments of NBC at 2-4, 5; Reply Comments of Appalachian Broadcasting Corporation at 3; Reply Comments of Corpus Christie, Inc., Louisiana Television Broadcasting Corp. & Mobile Video Tapes at 2; Reply Comments of Hubbard Broadcasting at 2; Reply

Charlotte report's results, and expressed unequivocal disagreement with the Commission's assumption.^{16/} Equipment manufacturers agreed.^{17/} Nearly every party that responded on the point shared this skepticism about the Commission's assumption.^{18/} The undersigned submit that the Sixth Report and Order misreports the balance of the comments, which were nearly unanimous in the position that the Charlotte tests were inconclusive.

Despite the lack of supporting evidence and contrary to the nearly unanimous consensus of commenters, in the Sixth Report and Order the Commission repeated its "conclusion" that television operations on the lower VHF channels would be subject to a number of technical problems including ambient noise levels due to leaky power lines, vehicle ignition

Comments of Retlaw Enterprises Inc. at 3-6; Reply Comments of Scripps Howard Broadcasting at 9-10; Reply Comments of Tribune at 6-8.

^{16/} See, e.g., Comments of du Treil, Lundin & Rackley at 8 (disagreeing with the Commission's suggestion that lower VHF channels are unsuitable for DTV); Comments of AFCCE at 14, 16 (declining to make a recommendation on the suitability of lower VHF channels, in light of the insufficient data available).

^{17/} See, e.g., Comments of Harris Corporation at 3.

^{18/} See, e.g., Comments of Department of Special Districts, San Bernardino County at 6 ("The Commission's conclusion that the low band VHF channels are 'less suitable for broadcasting because of high levels of noise' collides with 50 years of experience and suspends common sense.") (citation omitted); Comments of Media General, Inc. & Park Acquisitions, Inc. at 3 (pointing out that the Commission's technical assumptions about how DTV will function are based on computer models and only brief tests).

systems, and other impulse noise sources. See Sixth Report and Order ¶ 82.

No one yet knows exactly how digital television will "play out" in the field, and channels 2 through 6 may yet prove unsatisfactory. Other channels may be unsuitable as well, however. The point is simply that the Charlotte tests are at best inconclusive on the point. No conclusions can yet be drawn about Channels 2 through 6. None at all. There is, therefore, no sound engineering reason to attach a label of special uncertainty at this point to those channels, to treat them any differently from other channels. There will be time enough, later, to evaluate the field data and make sound conclusions about which channels work and which do not.

II. THE SPECIAL CHARACTERISTICS OF CHANNELS 2-6

In addition, the Commission's decision to cast a shadow of uncertainty on channels 2-6 is inconsistent with the public interest, in light of the unique effectiveness of channels 2-6 for provision of television service to the public.

To begin with, it is beyond dispute that due to their unique propagation characteristics and ability to cover and to overcome unusual terrain, the lower VHF channels offer wider area coverage than other channels. The result is more efficient service to rural areas and to smaller towns located in fringe areas. Thus the 293 stations presently broadcasting, or authorized to broadcast, on channels 2

through 6 are presently able to provide free over-the-air broadcast service to viewers in areas well beyond those that can be served by UHF stations. Moreover, they provide service to viewers at the edge of their predicted Grade B contours, and even beyond. It is for precisely these reasons that commenters argued potential noise problems at the lower VHF channels are simply not a reason to discard the channels for digital television use. NBC, for instance, argued that "the advantages of longer range propagation with significantly lower power compensate for the characteristics of the low-band VHF frequencies that can impair DTV service."^{19/}

Also, there are few other possible uses for this spectrum. The spectrum between channels 2 through 6 is not likely to be a high priority for alternative users of spectrum.^{20/} For example, as comments filed with the Commission demonstrate, even public safety and land mobile

^{19/} See also Comments of San Bernardino County Department of Special Districts at 6 (noting that lower VHF channels are the "most accessible" channels in mountainous terrain); Reply Comments of Appalachian Broadcasting Corporation at 3 (arguing that VHF channels are uniquely well suited to television broadcasting in mountainous areas); Reply Comments of Hubbard Broadcasting at 2 (arguing that the Commission should retain channels 2-6 for television since the propagation characteristics of lower band VHF are superior to those of UHF in difficult terrain).

^{20/} See, e.g., Reply Comments of Appalachian Broadcasting Corporation at 4 (pointing out that channels 2 through 6 are "less valuable" for non-television uses); Reply Comments of Retlaw Enterprises at 3-6 (arguing that channels 2 through 6 are the least likely to be recoverable on a nationwide basis).

users have little interest in this spectrum.^{21/} Indeed, very few uses can be made of the spectrum in question, and the use that can be made (for instance, garage door openers) is not likely to bring the Commission the kinds of revenue it seeks in the spectrum recovery process.

Conversely, other channels may be (a) less suited for broadcast and (b) more attractive to alternative users. For instance, the spectrum at channels 47-51 is adjacent to other "give back" spectrum and is accordingly more suitable for other uses (i.e., since larger blocks of spectrum are easier to allocate to other uses), which would in turn be reflected in higher auction revenues. Arguably, then, it would have been more rational to mark channels 47-51, rather than channels 2-6, for tentative recovery.

Moreover, in light of the specially favorable characteristics of the channel 2-6 spectrum for broadcast use, the public interest would be best served by the Commission's affirmatively searching for ways in which these channels could be preserved for terrestrial DTV despite any noise problem that arises. The Commission could, for instance, encourage manufacturers to develop more robust receivers. In addition, it could tackle any such problems at their source (e.g., by addressing leakage from power lines). The undersigned suggest that the Commission not rush to discard an area of spectrum so

^{21/} See, e.g., Comments of California Dept. of General Services Telecommunications Division at 8-9; Reply Comments of APCO at 7-8.

well suited for broadcast (and so poorly suited for anything else), when other solutions are available.

In light of the Commission's demonstrated commitment to efficient use of spectrum, the undersigned respectfully suggest that the public interest would be better served if the suitability of channels 2-6 for broadcast were not cast into doubt by the Sixth Report and Order.

III. UNCERTAINTY CAUSED BY THE COMMISSION'S DECISION

Finally, the uncertainty caused by "maybe and maybe not" status could cause practical problems for channel 2-6 licensees during the transition. Just as Joint Broadcasters argued that the Commission's early proposal would be disruptive because it determined that lower VHF stations would have to abandon their facilities in 2006,^{22/} the undersigned assert that it is equally or more disruptive for the Sixth Report and Order to warn these stations that they might have to, and to suggest that they have any extra (but perhaps, as a practical matter, insurmountable^{23/}) burden to satisfy before

^{22/} Comments of Joint Broadcasters at 36-37.

^{23/} It is hard to know what will convince the Commission that channels 2-6 are appropriate for DTV use, when the Commission has labelled them questionable despite inconclusive data and nearly unanimous opposition from broadcasters and engineers.

Moreover, if the Commission auctions recovered television spectrum in 2002, then any decision about channels 2-6 will need to be made in 2000 or 2001, well before DTV broadcasting has commenced for a majority of broadcasters, and well before data has been accumulated and definitively evaluated. This raises further questions about the basis on which the Commission's decision will be made.

the Commission will consider permitting them to keep their facilities.^{24/}

Over 300 stations are directly affected by ¶ 83.^{25/} The Commission's decision will cast an injurious stigma of "second class" status on these stations by carving unnecessary distinctions among broadcasters. Stations with NTSC and DTV assignments between 7 and 46 will be safe in the assurance that they can operate on a single DTV channel throughout the transition and choose the channel of their preference at its conclusion. Stations with NTSC and DTV assignments between 60-69 face certain disruption, to be sure, but there are many fewer of them (just over a hundred), and they have the assurance that at the end of the transition they will be able to conduct DTV operations on lower channels that are both more efficient (less costly) and more effective in providing wide-area coverage. Stations with DTV or NTSC on channels 2-6, however, face not only uncertainty about the fate of their channels, but also the prospect of having to operate after the transition on less suitable channels. To avoid this prospect,

^{24/} As a practical matter, the decision at ¶ 83 is not necessary to the Commission's decision. That is to say, the Commission has not, at this time, committed to a specific core spectrum. Nor, as it points out, has it incorporated any bias in its assignment of channels between 2 and 6. Accordingly, labelling channels 2 through 6 as somehow "suspect" and "second class" could be readily deleted from the Commission's decision without affecting any other part of that decision.

^{25/} There are 312 stations with either an NTSC channel between 2-6, a DTV channel between 2-6, or both channels between 2-6.

they would have to disprove what appears to be a default (and unjustified) presumption against them.

The doubts these stations face could interfere with the transition to digital. Stations in channels 2-6 are necessarily unsure as to whether they will be able to keep their channels after transition, and uncertain as to what evidence will be sufficient to satisfy the Commission that these channels are appropriate. And, quite simply, good business sense will necessarily dictate cautious investment in facilities that may need to be abandoned. The resulting uncertainty during rollout may temper and distort investments and dampen enthusiasm for full and vigorous DTV implementation.

IV. CONCLUSION

The television industry and the public it serves should embark on the DTV transition with the slate clean,^{26/} so to speak, with no "presumptions" or "questions" or

^{26/} As Joint Broadcasters pointed out, "no one knows exactly how DTV will function in the field or to what extent predictions made now will bear out under the stress of more than 3,200 operating stations." Comments of Joint Broadcasters at 34. One possibility that remains to be explored, for instance, is the extent to which engineering solutions can mitigate for the noise levels predicted at the lower VHF channels. See Comments of Meredith Corporation at 4 (The "broadcast industry grew up with the low VHF band, . . . [is] fully aware of its transmission characteristics and quirks . . . [and broadcasters] have been able to engineer around such problems."). The Commission's decision to cast a shadow on channels 2-6 may distort any potential development of alternative solutions, and may obscure the extent to which stations and the public consider the advantages of VHF to outweigh the disadvantages.

"concerns" about any channels, and with the guarantee that all channels will be fairly and equally considered for the ultimate core. If any channels are singled out for presumptive recapture at the end of the transition, for the reasons stated above, they should be channels 47-51.

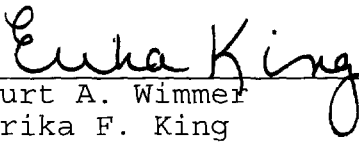
For the reasons explained above, the undersigned respectfully request that the Commission reconsider its decision in ¶ 83 of the Sixth Report and Order. The undersigned urge the Commission on reconsideration to make clear that

in light of the inconclusiveness of the engineering data currently available and the special suitability of channels 2-6 for efficient wide-area television service to the public, the Commission concludes that there is no reason, at present, to question the appropriateness of VHF channels 2 through 6 for digital broadcast. Accordingly, all channels between 2 and 51 will be fairly and equally considered for the ultimate core.

Respectfully submitted,

KAUZ-TV, NTSC Channel 6, Wichita Falls, TX
KBSD-TV, NTSC Channel 6, DTV Channel 5, Ensign, KS
KDLH (TV), NTSC Channel 3, Duluth, MN
KGBT-TV, NTSC Channel 4, Harlingen, Tx
KGWL-TV, NTSC Channel 5, Lander, WY
KGWN-TV, NTSC Channel 5, Cheyenne, WY
KIMT (TV), NTSC Channel 3, Mason City, IA
KLBY (TV), NTSC Channel 4, Colby, KS
KPRC-TV, NTSC Channel 2, Houston, TX
KRON-TV, NTSC Channel 4, San Francisco, CA
KTVS (TV), NTSC Channel 3, Sterling, CO
KXAS-TV, NTSC Channel 5, Fort Worth, TX
WANE-TV, DTV Channel 4, Fort Wayne, IN
WCIA (TV), NTSC Channel 3, Champaign, IL
WDIV (TV), NTSC Channel 4, Detroit, MI
WESB (TV), NTSC Channel 3, Hartford, CT

WGBH-TV, NTSC Channel 2, Boston, MA
WHSV-TV, NTSC Channel 3, Harrisonburg, VA
WIVB-TV, NTSC Channel 4, Buffalo, NY
WJBF (TV), NTSC Channel 6, Augusta, GA
WJXT (TV), NTSC Channel 4, Jacksonville, FL
WOWT (TV), NTSC Ch. 6, Omaha, NE
WPSD-TV, NTSC Channel 6, Paducah, KY
WRBL (TV), NTSC Channel 3, Columbus, GA
WTVY (TV), NTSC Channel 4, Dothan, AL


Kurt A. Wimmer
Erika F. King

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
Post Office Box 7566
Washington, D.C. 20044
(202) 662-6000

May 29, 1997

Their Attorneys